

| ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)  |  |                   |                     |  |                     |                     | February 2003       |                     |                     |                     |            |
|---|--|-------------------|---------------------|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration   |  |                   |                     | PE NUMBER AND TITLE<br>0604768A - Brilliant Anti-Armor Submunition (BAT) |                     |                     |                     |                     |                     |                     |            |
| COST (In Thousands)   |  | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate  | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to<br>Complete | Total Cost |
| Total Program Element (PE) Cost   |  | 106860            | 42942               | 55075  | 9836                | 2                   | 0                   | 0                   | 0                   | 0                   | 594413     |
| 2NT   | BAT OPERATIONAL TEST                         | 69                | 0                   | 0  | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 842        |
| 687   | BAT P3I                                      | 102792            | 0                   | 0  | 3                   | 2                   | 0                   | 0                   | 0                   | 0                   | 170360     |
| 688   | ATACMS BLK II                                | 3999              | 0                   | 0  | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 315361     |
| MD6   | ARMY TACTICAL MISSILE SYSTEM -<br>PENETRATOR | 0                 | 0                   | 55075  | 9833                | 0                   | 0                   | 0                   | 0                   | 0                   | 64908      |
| P01   | MULTI - MODE SEEKER DEVELOPMENT AND<br>TEST  | 0                 | 42942               | 0  | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 42942      |
| <p><b><u>A. Mission Description and Budget Item Justification:</u></b> This Program Element (PE) provides funding for the BAT P3I and related BAT Operational Test, Army Tactical Missile System (ATACMS) Block II, Multi-Mode Seeker and the ATACMS Penetrator (ATACMS-P) Programs.</p> <p>The BAT P3I program provided a new sensor suite (millimeter wave and imaging infrared) to the basic BATs acoustic and infrared capacity, which greatly improved inclement weather capability and effectiveness against countermeasures. The BAT P3I submunition attacked time critical, high priority targets, including cold, stationary, armored targets, Surface-to-Surface Missile (SSM) Transporter Erector Launchers (TELs), and Heavy Multiple Rocket Launchers (MRLs). The BAT/BAT P3I have the capability to be dispensed from alternate carriers which provides the Objective Force with additional capability with low collateral damage.</p> <p>The ATACMS Block II missile is a version of the currently fielded and combat-proven Army TACMS Block I missile and is designed to carry 13 BAT or BAT P3I submunitions. The ATACMS Block II (loaded with BAT or P3I submunitions) provides a deep strike capability to delay, disrupt, neutralize, or destroy armored combat vehicles/organization. The ATACMS Block II missile is fired from the M270A1 launcher and the High Mobility Artillery Rocket System (HIMARS).</p> <p>The ATACMS-P is a standoff ballistic-missile-delivered penetrator weapon for use against fixed hard and deeply buried operational and tactical targets. ATACMS-P will complement current ATACMS Family of Munitions (AFOM) operational capabilities by adding that of attacking and destroying Hardened and/or Deeply Buried Targets (HDBT) with a penetrator payload/warhead. These targets are considered High Value Targets (HVTs) posing a considerable threat to U.S. and coalition forces.</p> |  |                   |                     |  |                     |                     |                     |                     |                     |                     |            |

**ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)****February 2003****BUDGET ACTIVITY****5 - System Development and Demonstration****PE NUMBER AND TITLE****0604768A - Brilliant Anti-Armor Submunition (BAT)**

The Muti-Mode Seeker (MMS) Program will complete the development, assembly, and test of a Multi-Mode Tactical Seeker. This seeker will search, detect, acquire, and track stationary and moving TELs, MRLs, and armored vehicles. The seeker, which uses millimeter wave and imaging infrared, will permit modern weapon systems to be operational in near all-weather conditions. MMS funding is also required to support an urgent need for a Semi-Active Laser (SAL) BAT/Unmanned Aerial Vehicle (UAV)-BAT capability in order to conduct missions in various locations with differing terrain to support the ongoing war on terrorism. The submunition's ability to maneuver coupled with the SAL seeker will give the warfighter precise targeting capability with a reduced probability of collateral damage.

These programs support the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

The ATACMS BLK II and BAT P3I programs have been terminated after FY03 in order to fund Transformation and other higher priority Army programs.

| <b><u>B. Program Change Summary</u></b> | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> |
|---|----------------|----------------|----------------|----------------|
| Previous President's Budget (FY 2003)   | 122868         | 190293         | 110615         | 34723          |
| Current Budget (FY 2004/2005 PB)        | 106860         | 42942          | 55075          | 9836           |
| Total Adjustments                       | -16008         | -147351        | -55540         | -24887         |
| Congressional program reductions        |                | -145293        |                |                |
| Congressional rescissions               |                | -598           |                |                |
| Congressional increases                 |                |                |                |                |
| Reprogrammings                          | -12613         | -246           |                |                |
| SBIR/STTR Transfer                      | -3395          | -1214          |                |                |
| Adjustments to Budget Years             |                |                | -55540         | -24887         |

| ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)   |  | February 2003   |
|--|--|---|
| BUDGET ACTIVITY<br><b>5 - System Development and Demonstration</b>   |  | PE NUMBER AND TITLE<br><b>0604768A - Brilliant Anti-Armor Submunition (BAT)</b> |
| <p>FY04/FY05 decreases due to the termination of the ATACMS BAT P3I program after FY03 in order to support Transformation and other higher priority Army programs.</p> |  |   |

| ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)  |  |                   |                     |  |                     |                     | February 2003         |                       |                       |                       |            |
|--|--|-------------------|---------------------|--|---------------------|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration  |  |                   |                     | PE NUMBER AND TITLE<br>0604768A - Brilliant Anti-Armor Submunition (BAT) |                     |                     |                       | PROJECT<br>MD6        |                       |                       |            |
| COST (In Thousands)  |  | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate  | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate   | FY 2008<br>Estimate   | FY 2009<br>Estimate   | Cost to<br>Complete   | Total Cost |
| MD6  | ARMY TACTICAL MISSILE SYSTEM -<br>PENETRATOR | 0                 | 0                   | 55075  | 9833                | 0                   | 0                     | 0                     | 0                     | 0                     | 64908      |
| <p><b><u>A. Mission Description and Budget Item Justification:</u></b>The Army Tactical Missile System-Penetrator (ATACMS-P) is a standoff ballistic-missile-delivered penetrator weapon for use against fixed hard and deeply buried operational and tactical targets. ATACMS-P will complement current ATACMS Family of Munitions (AFOM) operational capabilities by adding the capability to attack and destroy Hardened and/or Deeply Buried Targets (HDBT) with a penetrator payload/warhead. These targets, considered High Value Targets (HVT), pose a considerable threat to U.S. and coalition forces. The ATACMS-P missile provides the theater joint forces commander with all weather capability to defeat HDBTs with a standoff weapons system that eliminates the risk to aircrews required by existing (and currently planned) air dropped penetrating weapons. Due to missile speed, the ATACMS-P provides time critical response in disrupting or neutralizing high value targets in support of the joint forces commanders maneuver warfare plans. ATACMS-P provides the land component commander a system that also meets or exceeds the penetration capability of existing air dropped weapons.</p> <p>The program covered by this exhibit represents the start of a program that makes use of the concept of spiral development. This budget exhibit supports 1) the completion of development spiral one which provides theater commanders with an ATACMS Penetrator system which is operationally and logistically supportable and 2) the fundamental building block of development spiral two, the development of an extended range solid rocket motor which will provide additional range to the spiral one warhead system while also improving the overall ability of the system to penetrate harder fixed targets.</p> <p>The ATACMS Penetrator system spiral development program will incorporate performance upgrades which augment the capability to engage weapons of mass destruction. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).</p> |  |                   |                     |  |                     |                     |                       |                       |                       |                       |            |
| <b><u>Accomplishments/Planned Program</u></b>  |  |                   |                     |  |                     |                     | <b><u>FY 2002</u></b> | <b><u>FY 2003</u></b> | <b><u>FY 2004</u></b> | <b><u>FY 2005</u></b> |            |
| Initiate System Development and Demonstration (SDD) Program  |  |                   |                     |  |                     |                     | 0                     | 0                     | 30154                 | 6113                  |            |
| Procure Handmade Fuzes   |  |                   |                     |  |                     |                     | 0                     | 0                     | 2593                  | 0                     |            |
| Conduct Fuze and Penetrator Qualification for AFSB requirements and qualify industrial suppliers for full scale production of Penetrator and Fuze  |  |                   |                     |  |                     |                     | 0                     | 0                     | 3007                  | 0                     |            |
| Procure, Fabricate and Assemble Flight Test Assets (2 Missiles)  |  |                   |                     |  |                     |                     | 0                     | 0                     | 2846                  | 0                     |            |
| Flight test support and data acquisition including preparation, repair and modificaitons to existing test hard targets   |  |                   |                     |  |                     |                     | 0                     | 0                     | 1807                  | 2006                  |            |

| <b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)</b>  |  |                |                |                |   |                |                | <b>February 2003</b> |                       |                 |                   |
|---|--|----------------|----------------|----------------|---|----------------|----------------|----------------------|-----------------------|-----------------|-------------------|
| BUDGET ACTIVITY<br><b>5 - System Development and Demonstration</b>  |  |                |                |                | PE NUMBER AND TITLE<br><b>0604768A - Brilliant Anti-Armor Submunition (BAT)</b> |                |                |                      | PROJECT<br><b>MD6</b> |                 |                   |
| <u><b>Accomplishments/Planned Program (continued)</b></u>   |  |                |                |                |   |                |                | <u>FY 2002</u>       | <u>FY 2003</u>        | <u>FY 2004</u>  | <u>FY 2005</u>    |
| Initiate extended range solid rocket motor development  |  |                |                |                |   |                |                | 0                    | 0                     | 14668           | 1714              |
| Totals  |  |                |                |                |   |                |                | 0                    | 0                     | 55075           | 9833              |
| <u><b>B. Other Program Funding Summary</b></u>  |  | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u>  | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u>       | <u>FY 2009</u>        | <u>To Compl</u> | <u>Total Cost</u> |
| ATACMS Penetrator (CA6111)  |  | 0              | 0              | 0              | 68493   | 87924          | 99553          | 99447                | 4871                  | 0               | 360288            |
| <p><u><b>C. Acquisition Strategy:</b></u> The ATACMS-P Acquisition Strategy is to leverage technology from the on-going ATACMS-P Advance Technology Demonstration (ACTD). The Army will pursue a Sole Source contract with Lockheed Martin, Dallas the ACTD Prime Contractor to mitigate risk. We will execute the program in a Spiral Block approach. Block I will meet our threshold requirement (Standard Range). ATACMS-P Block II will meet our objective requirement (Extended Range) variant. Milestone C is scheduled for FY06.</p> |  |                |                |                |   |                |                |                      |                       |                 |                   |

| ARMY RDT&E COST ANALYSIS(R-3)                                      |                        |                                |                |              |   |              |                    |              | February 2003      |                       |            |                          |
|--|------------------------|--------------------------------|----------------|--------------|---|--------------|--------------------|--------------|--------------------|-----------------------|------------|--------------------------|
| BUDGET ACTIVITY<br><b>5 - System Development and Demonstration</b> |                        |                                |                |              | PE NUMBER AND TITLE<br><b>0604768A - Brilliant Anti-Armor Submunition (BAT)</b> |              |                    |              |                    | PROJECT<br><b>MD6</b> |            |                          |
| I. Product Development   | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2003 Cost | FY 2003 Award Date  | FY 2004 Cost | FY 2004 Award Date | FY 2005 Cost | FY 2005 Award Date | Cost To Complete      | Total Cost | Target Value of Contract |
| a . LMMCF-D  | SS/CPIF                | LMMFCS-TX                      | 0              | 0            |   | 49971        | 2Q                 | 4383         | 1Q                 | 0                     | 54354      | 0                        |
| b . CECOM C4I  | N/A                    | CECOM, NJ                      | 0              | 0            |   | 1227         | 1Q                 | 772          | 1Q                 | 0                     | 1999       | 0                        |
| c . Government Support   | N/A                    | AMCOM,RSA                      | 0              | 0            |   | 389          | 1Q                 | 112          | 1Q                 | 0                     | 501        | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| Subtotal:  |                        |                                | 0              | 0            |   | 51587        |                    | 5267         |                    | 0                     | 56854      | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| II. Support Cost   | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2003 Cost | FY 2003 Award Date  | FY 2004 Cost | FY 2004 Award Date | FY 2005 Cost | FY 2005 Award Date | Cost To Complete      | Total Cost | Target Value of Contract |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| Subtotal:  |                        |                                | 0              | 0            |   | 0            |                    | 0            |                    | 0                     | 0          | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |

| ARMY RDT&E COST ANALYSIS(R-3)                                      |                        |                                |                |              |   |              |                    |              | February 2003      |                       |            |                          |
|--|------------------------|--------------------------------|----------------|--------------|---|--------------|--------------------|--------------|--------------------|-----------------------|------------|--------------------------|
| BUDGET ACTIVITY<br><b>5 - System Development and Demonstration</b> |                        |                                |                |              | PE NUMBER AND TITLE<br><b>0604768A - Brilliant Anti-Armor Submunition (BAT)</b> |              |                    |              |                    | PROJECT<br><b>MD6</b> |            |                          |
| III. Test and Evaluation   | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2003 Cost | FY 2003 Award Date  | FY 2004 Cost | FY 2004 Award Date | FY 2005 Cost | FY 2005 Award Date | Cost To Complete      | Total Cost | Target Value of Contract |
| a . Test Support   | N/A                    | WSMR/RTTC                      | 0              | 0            |   | 1397         | 1Q                 | 1994         | 1Q                 | 0                     | 3391       | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| Subtotal:  |                        |                                | 0              | 0            |   | 1397         |                    | 1994         |                    | 0                     | 3391       | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| IV. Management Services  | Contract Method & Type | Performing Activity & Location | Total PYs Cost | FY 2003 Cost | FY 2003 Award Date  | FY 2004 Cost | FY 2004 Award Date | FY 2005 Cost | FY 2005 Award Date | Cost To Complete      | Total Cost | Target Value of Contract |
| a . In-House Support   | N/A                    | PFRMS Proj Ofc, RSA            | 0              | 0            |   | 2091         | 1Q                 | 2572         | 1Q                 | 0                     | 4663       | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| Subtotal:  |                        |                                | 0              | 0            |   | 2091         |                    | 2572         |                    | 0                     | 4663       | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| Project Total Cost:  |                        |                                | 0              | 0            |   | 55075        |                    | 9833         |                    | 0                     | 64908      | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |

| Schedule Profile Detail (R-4a Exhibit)                             |                |                |                |   |                | February 2003  |                       |                |
|--|----------------|----------------|----------------|---|----------------|----------------|-----------------------|----------------|
| BUDGET ACTIVITY<br><b>5 - System Development and Demonstration</b> |                |                |                | PE NUMBER AND TITLE<br><b>0604768A - Brilliant Anti-Armor Submunition (BAT)</b> |                |                | PROJECT<br><b>MD6</b> |                |
| <u>Schedule Detail</u>   | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u>  | <u>FY 2006</u> | <u>FY 2007</u> | <u>FY 2008</u>        | <u>FY 2009</u> |
| Award Design Contract  |                |                | 1Q             |   |                |                |                       |                |
| Program Decision Review (PDR)                                      |                |                | 2Q             |   |                |                |                       |                |
| Critical Decision Review (CDR)                                     |                |                | 4Q             |   |                |                |                       |                |
| Hardware Qualification   |                |                |                | 1Q  |                |                |                       |                |
| Production Qualification Flight Test (PQT)                         |                |                |                | 4Q  |                |                |                       |                |
| Milestone C IPR  |                |                |                |   | 1Q             |                |                       |                |